

Environmental Field Working Group

Placeware Meeting

March 11, 2003

CADD/GIS Technology Center Internet URL :

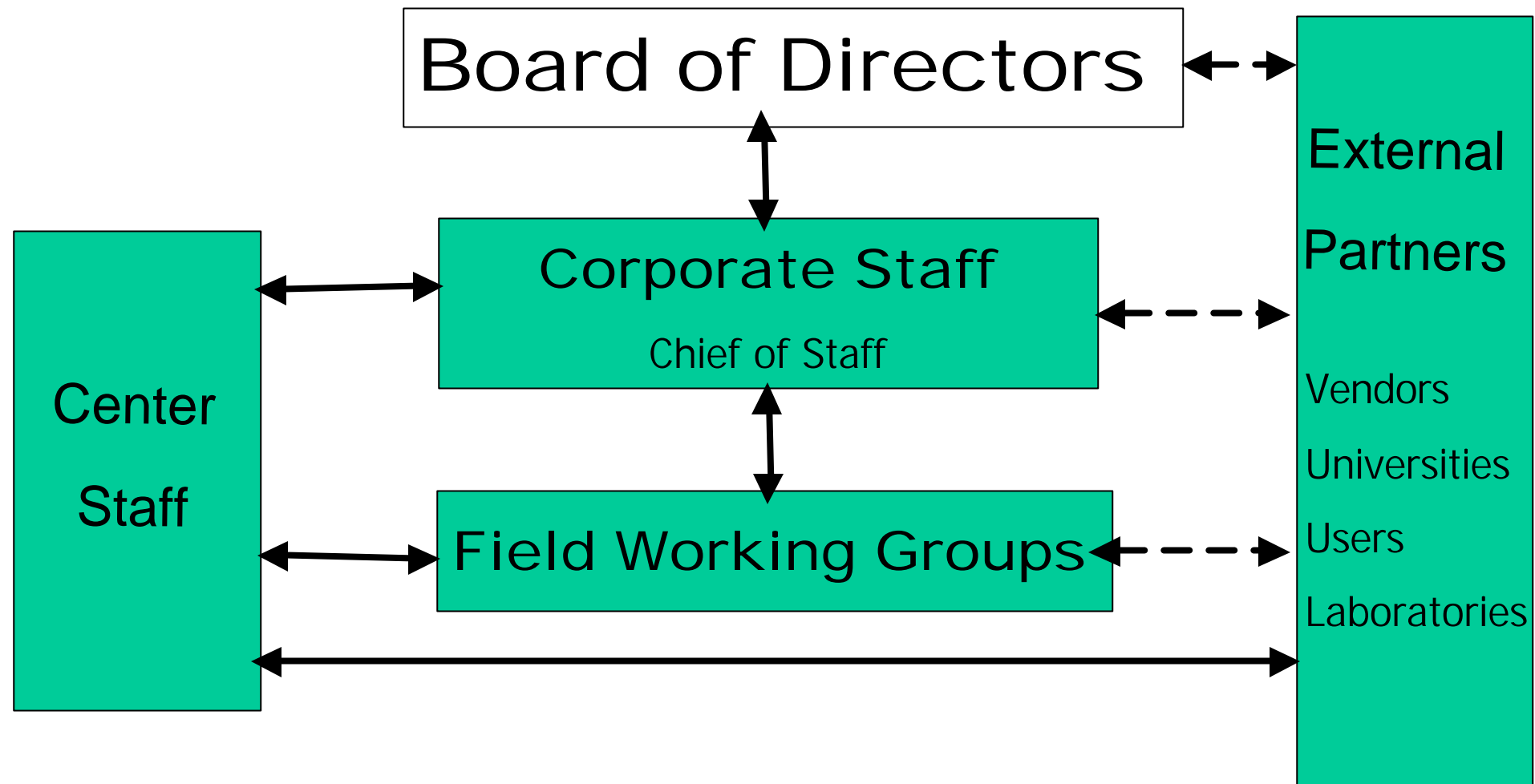
<http://tsc.wes.army.mil>

- **Joint Field Working Group Meeting:**
 - When - May 28 – 29, 2003
 - Location – Vicksburg, Mississippi

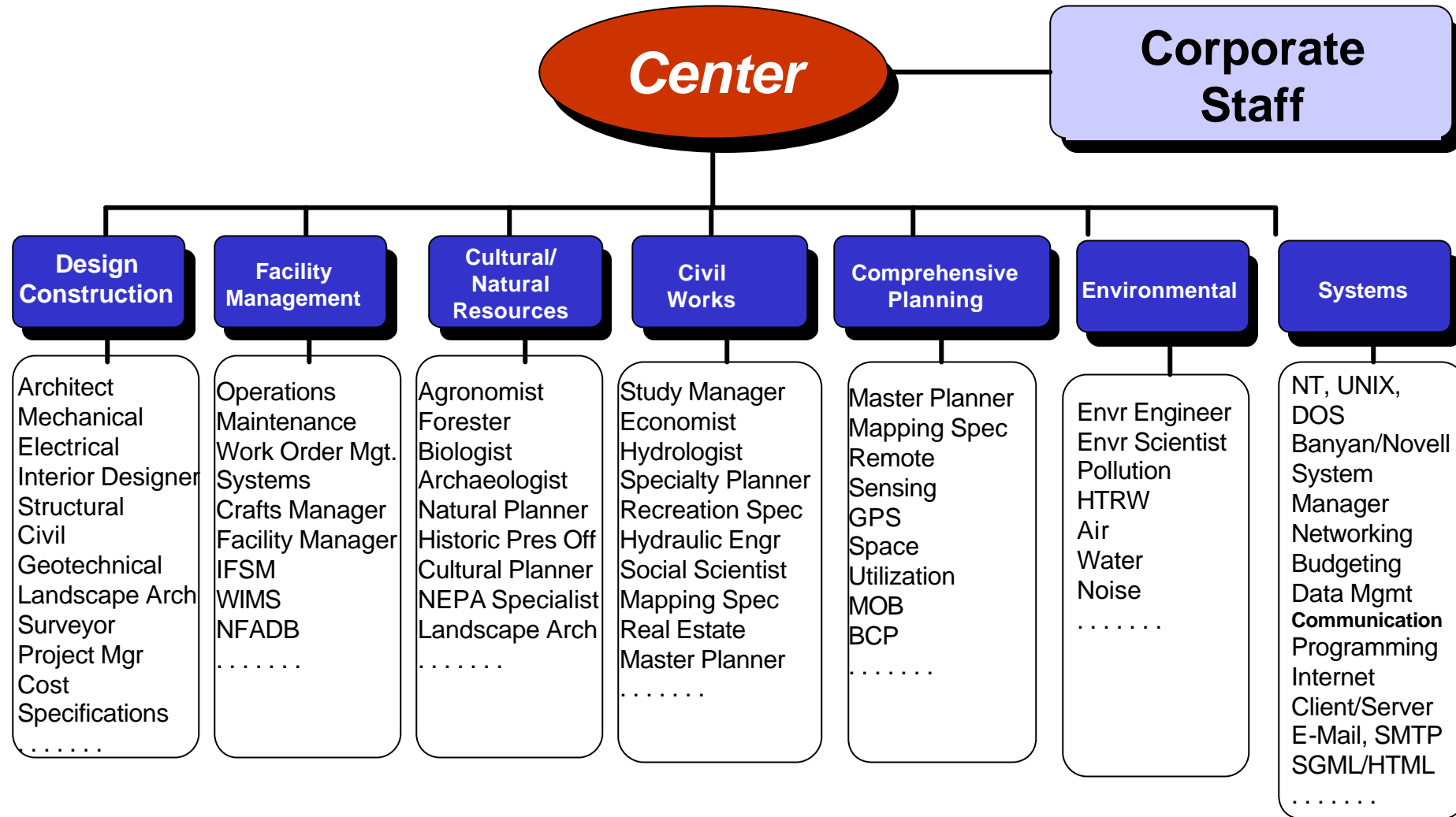
CADD/GIS Technology Center

for facilities, infrastructure, and environment

Organizational Chart



Field Working Groups



CADD/GIS Center Projects

- **Center Projects:**
 - Approved by Corporate Staff (CS) & Board of Directors (BOD) each Fiscal Year.
 - Center typically accepts project proposals for next Fiscal Year during February – March.
 - Project proposals for FY04 can be submitted via Center's Internet Website during February – March 2003.
 - Categories:
 - Core Mission (CADD, GIS, FM, & Object Standards) (45%)
 - Mission Related (e.g., CADD, GIS, FM, & Information Technology Tools, Guidance) (30%)
 - Mission Support (e.g., Center Internet/Intranet, Working Group Meetings, Symposium) (25%)

CADD/GIS Center Projects

- **FY03 Center Projects:**
 - Total of 29 approved by Center's CS and BOD for FY03 (pending availability of funds).
 - Categories
 - Core Mission – 6 Projects
 - Mission Related – 16 Projects
 - Mission Support – 7 Projects

FY03 Mission Related Projects

- *FY03 Projects Currently On-Hold Pending Availability of Funds:*
 - *3.036 – Historic & Digital Map Collection Methods & Online Retrieval Tool Development.*
 - *2.030 - Airfield Management Suite.*
 - *3.005 – Geotechnical Database.*
 - *3.001 – Populate A/E/C Compliant HVAC for TriForma 3D Cell Library and Preference Files.*
 - *1.040 - Use of GIS to Simplify Environmental Impact Analysis Process (EIAP).*

01.040 – Use of GIS to Simplify EIAP

Scope: Develop web and GIS based electronic checklist for Environmental Impact Analysis Process (EIAP). EIAP is method commonly used for ensuring that new construction projects are in compliance with National Environmental Policy Act (NEPA) legal requirements.

- Project Proposal originally submitted by Parrish Swearingen, Robins AFB, GA. Parrish now works for Tetra Tech EM, Inc.
- Project building on past/on-going work accomplished at Robins AFB and the Patuxent River Naval Air Station (PAX), Maryland.

– **Project Website:**

http://tsc.wes.army.mil/contacts/groups/FWG/Environmental/envprojects/01.040/01_040.htm



By Jim Weaver / courtesy USFWS

01.040 – Use of GIS to Simplify EIAP

Project to develop: (1) A web-based interactive EIAP checklist (i.e., checklist to ensure compliance with National Environmental Policy Act (NEPA), (2) link to Real Property Management (RPM) website, and (3) Data model and data standards content for incorporation into “transactional” FMSFIE Environmental Entity Set.

Status:

Part 1 (Funded in FY01) -

- Final detailed SOW completed on January 24, 2001.
- Contract awarded by Robins AFB to Tetra Tech, Inc., Atlanta, GA, in August 2001.
- Draft EIAP Web-Based Application and PAX/Robins NEPA Checklist Report completed in January 2002.
- Environmental FWG met with Tetra Tech, Inc. for project reviews on April 24-27, 2002 and June 4, 2002.
- Part 1 development completed in August 2002.

Part 2 (Funded in FY02) –

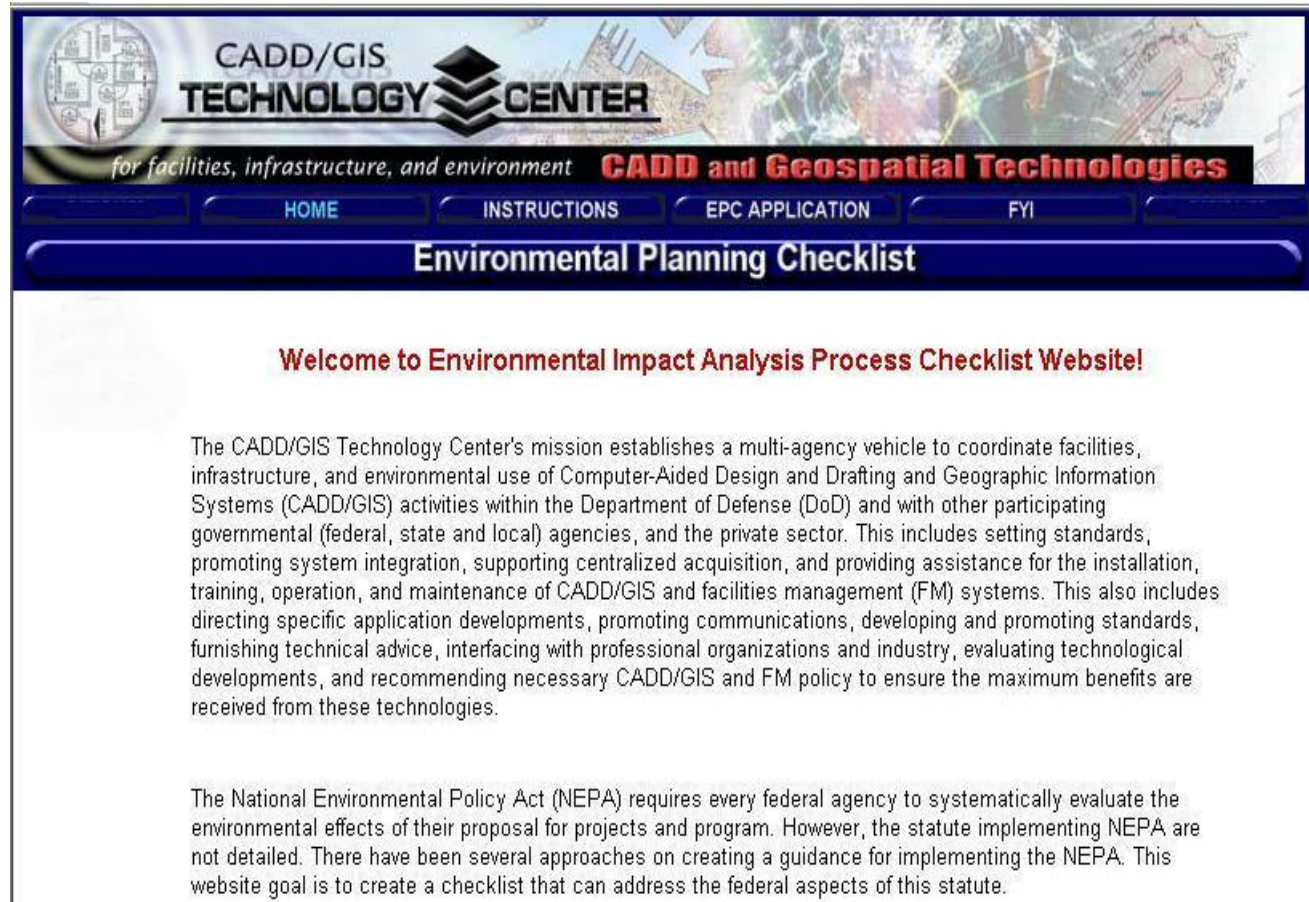
- Contract awarded to Tetra Tech, Inc. in September 2002.

Part 3 (To Be Funded in FY03) –

- Awaiting completion of Part 2 development and availability of FY03 funds.

01.040 – Use of GIS to Simplify EIAP

- Web-Based Application requires installation on server with Microsoft Active Server Page (ASP) software.
- Can be accessed via Internet using Internet Explorer or Netscape browser. Requires download and installation of free Macromedia Shockwave Player plug-in.



http://tsc.wes.army.mil/contacts/groups/FWG/Environmental/envprojects/01.040/01_040.htm

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Fiscal Year 2001 - 2002:

Project Scope & Status	Select Project No. 01.040 from Active Projects Website: http://tsc.wes.army.mil/projects/			
Project Overview	.ppt digital format	.pdf digital format		
Detailed Scope of Work	EIAP 12401.doc	EIAP 120401.pdf		
Project Deliverables:				
Draft Web Based EIAP Application		Username & Password = SDSFIE		
Downloadable Version of Draft EIAP Application (August 2002)	Readme.txt	Installation Instructions	Eiap install.doc	Eiap install.pdf
Create folder on your computer entitled "eiap". Download eiap.zip to that directory. Unzip, then "right-click" on each file & make sure "archive" is not checked under file properties.				
Create subfolder entitled "data" (e.g., eiap/data). Download eiap_data.zip to that directory. Unzip, then "right-click" on "data" folder & make sure "archive" is not checked under properties.				
Create subfolder entitled "images" (e.g., eiap/images). Download eiap_images.zip to that directory. Unzip, then "right-click" on "images" folder & make sure "archive" is not checked under properties.				
Create subfolder entitled "pdf" (e.g., eiap/pdf). Download eiap_pdf.zip to that directory. Unzip, then "right-click" on "images" folder & make sure "archive" is not checked under properties.				
Report – Comparison of Robins AFB & Patuxent River Naval Air Station Environmental Review Checklist (July 2002)			pax robins compare.pdf	
Environmental Review Checklist Database (Microsoft Access) (February 2002)			Ecl model.zip	

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items: *Items denoted in red are underway*

1. Prepare “EIAP Instructions” paper (Word 2000) to support: (a) Installation of NMCI compliant EIAP Application on web server, (b) Utilization and maintenance of EIAP Application, and (c) Deployment of EIAP application.

Deferred “Installation of NMCI compliant EIAP Application on web server” to to Part 3 (FY03 Funds).

Tetra Tech Comment – Will be putting together a user manual. Completion will be done when all changes to the Version 2 are complete. (Lead – Tracy Proud)

2. Change colors of codes (nothing, yellow and red).

Tetra Tech Comment – Color changes will be made to the introduction screen as well as the application. No color meaning section complete, yellow meaning section partially complete, and the red blocks meaning section is not complete. (Lead – Chris Martin)

3. Put “yes/no/don’t know” in “background”.

Tetra Tech Comment – Need further clarification. (Lead – Chris Martin)

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

4. Executable back button to look at previous questions.

Tetra Tech Comment – Back button will be added to allow for one step back only. Any further would disrupt NEPA decision tree logic. (Lead – Chris Martin)

5. Establish suggested SDSFIE compliant base map entity types for all Checklist questions (I thought the perspective as the CADD/GIS Technology Center here was to suggest the base map entity types that would be useful for a question and then each installation could choose which ones to create/use from that list. As opposed to suggesting the minimum base map entity types, having each installation do some homework and possibly adding to the list).

Tetra Tech Comment – Minimum Entity Type for Base map, as well Entity Type for each corresponding question will be posted on each question on the right portion of the input screen. This list will be based on input from the last EFWG meeting. (Lead – Tracy Proud)

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

6. Summary bullet in front of answer (message). I'm not sure what this is.

Tetra Tech Comment – Need further clarification from the EFWG (Lead – Tracy Proud).

7. Password protect administrator tools.

Tetra Tech Comment – All Administrator Tools components might be better suited to an ASP version. (Lead – Chris Martin)

8. *Sections should have intuitive names.*

Tetra Tech Comment – Each section will follow the 4 pillars of Environmental: Restoration, Conservation, Compliance, and Pollution Prevention. (Lead – Tracy Martin)

9. *Add comments field to the questions and the reports.*

Tetra Tech Comment – A comment field will be added in the input screen. The location will be below the Yes/No/Don't Know" buttons. These comments will then be presented in the summary report. (Lead – Chris Martin)

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

10. Establish automated tracking number (Use Work Item/Number) and the ability of an installation to link to their current Work Item/Numbering system.

Tetra Tech Comment – This can be done however it would be better suited to an ASP version.
(Lead – Chris Martin)

11. Break down summary reports to include comments from questions and comments concerning the report.

Tetra Tech Comment – A comment field will be added in the input screen. The location will be below the “Yes/No/Don’t Know” buttons. These comments will then be presented in the summary report. (Lead – Chris Martin)

12. Fit to full screen.

Tetra Tech Comment – Will have to be done in the ASP version. (Lead – Chris Martin)

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

13. Incorporate Search Tool.

Tetra Tech Comment – What search capabilities are requested? Any heavy search engine will have to be done in the ASP version. (Lead – Chris Martin)

14. Document rights/privileges of users/administrators.

Tetra Tech Comment – Will be putting together a user manual. Completion will be done when all changes to the Version 2 are complete. (Lead – Tracy Proud)

15. Establish “Save as” option that allows the environmental review for one project to be copied over to another project number.

Tetra Tech Comment – Will be completed. (Lead – Chris Martin)

16. Edit capability within summary documentation.

Tetra Tech Comment – Because of the complex logic behind each question it is not practical to edit during the summary table. This can only be done through the existing edit button located on the summary page. (Lead – Chris Martin)

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

17. Establish links to appropriate Federal regulations at CADD/GIS Technology Center's Federal Real Property Management Regulations (RPM) website -

<http://tsc.wes.army.mil/rpm/>

Tetra Tech Comment – Prior to any links being made further clarification will have to be given as to what and where the links will be made. (Lead – Tracy Proud)

18. Update content and Appendix C of “Comparison of Robins AFB & Patuxent River Naval Air Station Environmental Review Checklist” report, incorporating comments received from Environmental FWG and PAX during FY02 and the updated questions to date.

Tetra Tech Comment – This document will be made final and will include comments received from the EFWG meeting as well as the new checklist questions received from PAX during FY02. (Lead – Tracy Proud)

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

19. Provide information concerning how to use the software, connect to a GIS, and the base map entity types defined as part of the HELP file, and “EIAP Instructions” paper.

Tetra Tech Comment – Will be putting together a user manual. Completion will be done when all changes to the Version 2 are complete. (Lead – Tracy Proud)

20. Prepare draft logical data model for incorporation of EIAP decision tree data into transactional Facility Management Standard (FMSFIE).

Tetra Tech Comment – Will be obtaining the FMSFIE data model from the website to incorporate EIAP into data model. (Lead – Tracy Proud)

21. Design EIAP Application to record the EIAP decision tree data in a Microsoft Access (2000) database. Is this what we really want or should we leave it open for the contractor to determine the best database that is NMCI compliant?

Tetra Tech Comment – ?????????.

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

22. Permit the User to be able to move from one section to another without being forced to answer all of the questions sequentially. Currently, all questions in each section have to be answered before being able to go to the next section.

Tetra Tech Comment – Will be completed and put on Version 2. (Lead – Chris Martin)

23. Change wording on website and in application to “third” person, rather than first person.

Tetra Tech Comment – Will be completed. (Lead – Tracy Proud)

24. If there are no action items, the user should simply move forward (i.e. see the next question) rather than have a statement saying “x,y,z” is not required and then requiring the user to click on this statement in order to move forward.

Tetra Tech Comment – If you answer “No”, then no “Note:” will appear and you will move to the next question. This will be completed. (Lead – Chris Martin)

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

25. Update EIAP Questions to be consistent with the updated PAX Questions (POC - Lasandra Teeters).

Tetra Tech Comment – All questions have been QC'd by the EFWG during the Atlanta meeting and those changes will be incorporated into Version 2. The updated PAX question will be reviewed and cross referenced to see if any additional changes should be made, if changes are required they will be approved by the EFWG prior to incorporation into Version 2.

26. With the new NMCI contract, the Navy and Marine Corps will not be able to download and install the Shockwave plug-in. Also, Microsoft ASP may not be used. Provide brief discussion/recommendations paper concerning the provision of a platform independent NMCI compliant web-based EIAP application for Part 3 development (to be funded in FY03).

Tetra Tech Comment – A recommendation letter will be drafted for the EFWG which will include migration strategies for Version 3. Tetra Tech needs input on what platform can be utilized prior to setting a completion date.

Use of GIS to Simplify Environmental Impact Analysis Process (EIAP)

Part 2 Action Items (Cont.): *Items denoted in red are underway*

27. Additional considerations:

- a. The government will own the code. Contractor will deliver CD containing all source code.
- b. The final software should be easily editable by government personnel (i.e. non-technical personnel via a module). The final software must have the capability to:
 - i. Add/Delete/Edit sections, section names, and modify section order.
 - ii. Add/Delete/Edit questions and modify question order.

- **Nobility, Inc.**
 - Website – <http://www.nobility.com>
 - Office Location – Vancouver, BC
 - One of Products (Nobility EM) is similar to the EIAP application.
 - One implementation is at White Sands Missile Range, NM.
 - Do we want to invite Nobility to the May meeting, or arrange a meeting at White Sands?

QUESTIONS?

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for facilities, infrastructure, and environment

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CADD GIS Technology Center Internet URL :
<http://tsc.wes.army.mil>

01.040 – Use of GIS to Simplify EIAP

EPC Help - Microsoft Internet Explorer

EIAP Checklist - HELP

Step 1: ENTER
Step 2: LOGIN
Step 3: SESSION
 New Session
 Existing Session
Step 4: PROJECT INFO
 New Session
 Existing Session
Step 5: SECTIONS
Step 6: QUESTIONS
Step 7: REVIEW/EDIT
Step 8: END

Login with your user name **(1)** and password **(2)**. (If you have not yet been granted access to the checklist, click on the e-mail link **(3)** provided at the bottom.) Then click on "Log in" to proceed **(4)**.

User name: **1**

Password: **2**

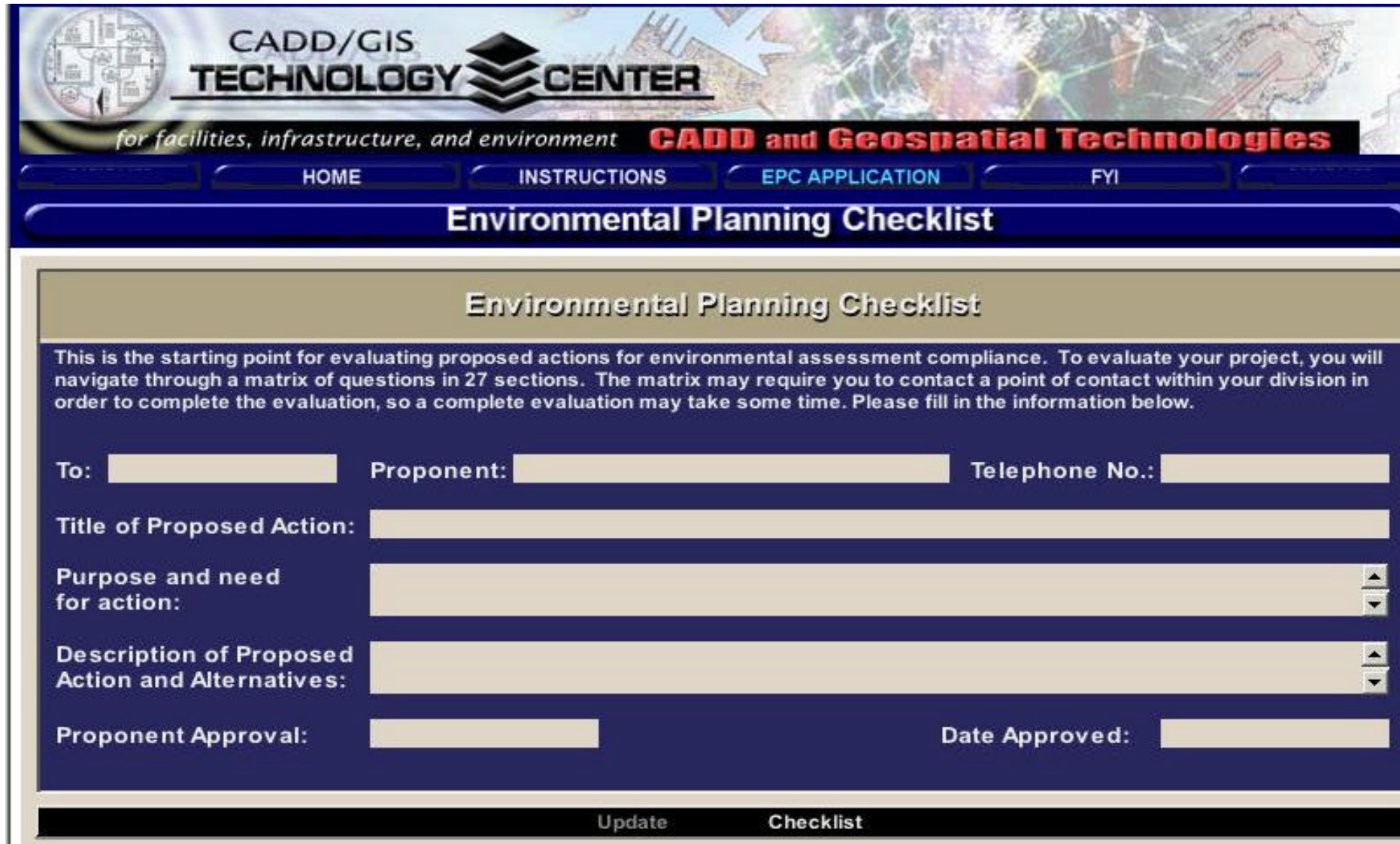
 **4**

3

If you are unable to access the password, please contact: joe.lahnke@ttami.com

back next

01.040 – Use of GIS to Simplify EIAP



The screenshot shows a web application interface for the "Environmental Planning Checklist". At the top, there is a banner with the "CADD/GIS TECHNOLOGY CENTER" logo and the text "for facilities, infrastructure, and environment" and "CADD and Geospatial Technologies". Below the banner is a navigation bar with buttons for "HOME", "INSTRUCTIONS", "EPC APPLICATION", and "FYI". The main title "Environmental Planning Checklist" is displayed in a large, bold font. Below the title, there is a paragraph explaining the purpose of the checklist: "This is the starting point for evaluating proposed actions for environmental assessment compliance. To evaluate your project, you will navigate through a matrix of questions in 27 sections. The matrix may require you to contact a point of contact within your division in order to complete the evaluation, so a complete evaluation may take some time. Please fill in the information below." The form contains several input fields: "To:", "Proponent:", "Telephone No.:", "Title of Proposed Action:", "Purpose and need for action:", "Description of Proposed Action and Alternatives:", "Proponent Approval:", and "Date Approved:". The "Purpose and need for action:" and "Description of Proposed Action and Alternatives:" fields have scrollbars, indicating they are text areas. At the bottom of the form, there are two buttons: "Update" and "Checklist".

Environmental Planning Checklist

This is the starting point for evaluating proposed actions for environmental assessment compliance. To evaluate your project, you will navigate through a matrix of questions in 27 sections. The matrix may require you to contact a point of contact within your division in order to complete the evaluation, so a complete evaluation may take some time. Please fill in the information below.

To: Proponent: Telephone No.:


Title of Proposed Action:


Purpose and need for action:

Description of Proposed Action and Alternatives:

Proponent Approval: Date Approved:

01.040 – Use of GIS to Simplify EIAP



**CADD/GIS
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[HOME](#) [INSTRUCTIONS](#) [EPC APPLICATION](#) [FYI](#)

Environmental Planning Checklist

Section


- 1 Soil Disturbance
- 2 Storm Water and Wastewater
- 3 Critical Area and Coastal Zone
- 4 Historic Preservation
- 5 Capital Improvements
- 6 Endangered Species
- 7 Land Use
- 8 Tree Clearing
- 9 Bird/Aircraft Strikes
- 10 Deer Auto Collision
- 11 Pesticides
- 12 Solid Waste and Recycling
- 13 Hazardous Waste and Materials
- 14 Polychlorinated Biphenyls (PCB)
- 15 Air Quality (Emissions)
- 16 Drinking Water
- 17 Installation Restoration
- 18 Petroleum Systems
- 19 Oil Control
- 20 Groundwater Monitoring Wells
- 21 Asbestos
- 22 Lead
- 23 Socioeconomics
- 24 Traffic
- 25 Noise
- 26 Aesthetics
- 27 Environmental Justice


Environmental Planning Checklist


< Select a section from the list at left.


You may begin in any of the available 27 sections.

As you proceed through the checklist, you will see the following symbols indicating your progress in each section:


Section not yet visited - 

Section partially completed - 

Section completed - 

 < When you see this icon, place you mouse over the icon to see special instructions.

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HOMEINSTRUCTIONS**EPC APPLICATION**FYI

Environmental Planning Checklist

Section

- 1 Soil Disturbance
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- 25 Noise
- 26 Aesthetics
- 27 Environmental Justice

Question

33. Does the proposed project involve any actions located within 1,000 feet of any Federal Candidate, State watchlist, or other species or habitat enjoying a special designation assigned by Federal or state agencies?

YesNoDon't Know

Entity Types

Question specific entity types

flora_special_plant_site
flora_replanting_site
fauna_special_habitat_site
shoreline_buffer_critical_area
preserve_area

Base map entity types

installation_area,
surface_water_course_centerline,
road_area, airfield_surface_site,
vehicle_parking_area,
vehicle_driveway_area,
structure_existing_site, shoreline

Review/Edit AnswersEnd Session

FY03 Core Mission Projects

- **96.013** – Spatial Data Standard (SDSFIE) for Facilities, Infrastructure, and Environment
- **96.015** – Facility Management Standard (FMSFIE) for Facilities, Infrastructure, and Environment
- **96.017** – Maintenance, Revision, and Implementation of A/E/C CADD Standard
- **96.003** – Federal Geographic Data Committee (FGDC) Participation
- **96.055** – Support of National Institute of Building Sciences (NIBS) Facility Information Council
- **1.044** – Consolidated Object Strategy

FY03 Mission Support Projects

- **96.001** – Publishing the CADD/GIS Insights (Web Bulletin)
- **96.011** – Center Internet & Intranet Technology
- **96.150** – Marketing
- **96.200** – Support of BOD, Corporate Staff, and FWG
- **96.210** – Equipment (Maintenance Support)
- **99.021** – Foundation Knowledge Web Portal
- **99.035** – Balanced Scorecard

FY03 Mission Related Projects

- **96.023** – Generic CADD Details Library Update
- **98.190** – Continued Support of Electronic Bid Solicitation (EBS)
- **1.039** – Development of FMSFIE Work Management Entity Set
- **2.042** - Spatial Data Standard for Historic Buildings and Structures
- **3.003** – Structural Detail Library Additions
- **3.006** - Standard Practice for Preparation of As-Built CADD Files
- **3.009** – Interior Design Furniture Procurement Software
- **3.013** – Develop FEMA Hazard and Disaster Entities Within the SDSFIE
- **3.019** – Addition of Geospatial Range and Operational Area Data Entities to Current SDSFIE

FY03 Mission Related Projects

- **3.023** - GIS Techniques for Assessing Military Encroachment for Natural and Cultural Resources
- **3.025** - A/E/C CADD Standard Compliant Drawing Set
- **3.029** – MORS – Map Organization and Retrieval System